

**What is claimed is:**

1           1. A process for preparing a porous material having  
2     interconnected pores, comprising the following steps:  
3           dissolving one or more kinds of bioresorbable  
4           polymers and a low molecular weight oligomer in  
5           an organic solvent to form a bioresorbable  
6           polymer solution; and  
7           a coagulating step: exposing the bioresorbable  
8           polymer solution to a coagulant to form the  
9           porous material, wherein the low molecular  
10          weight oligomer is soluble in the coagulant,  
11          and the bioresorbable polymer is insoluble in  
12          the coagulant.

1           2. The process as claimed in claim 1, before the  
2     coagulating step, further comprising a step of making the  
3     bioresorbable polymer solution to form a pre-form.

1           3. The process as claimed in claim 2, wherein the  
2     pre-form forming step includes coating the bioresorbable  
3     solution onto a mold surface.

1           4. The process as claimed in claim 2, wherein the  
2     pre-form forming step includes pouring the bioresorbable  
3     solution into a container.

1           5. The process as claimed in claim 2, further  
2     comprising a step of drying the pre-form to partially or  
3     completely remove the organic solvent on the pre-form  
4     surface.

1           6. The process as claimed in claim 5, wherein the  
2 drying step makes the pre-form form a gel surface or a  
3 tack-free surface.

1           7. The process as claimed in claim 5, wherein the  
2 drying step is conducted in air at room temperature, by  
3 heating, in an oven, at a reduced pressure, or by  
4 radiation.

1           8. The process as claimed in claim 1, wherein the  
2 bioresorbable polymer has a molecular weight of 20,000 to  
3 1,500,000.

1           9. The process as claimed in claim 1, wherein the  
2 bioresorbable polymer is polycaprolactone (PCL),  
3 polylactic acid (PLA), poly-L-lactide (PLLA),  
4 polyglycolic acid (PGA), poly-lactic-co-glycolic acid  
5 copolymer (PLGA copolymer), polycaprolactone-polylactic  
6 acid copolymer (PCL-PLA copolymer),  
7 polycaprolactone-polyethylene glycol copolymer (PCL-PEG  
8 copolymer), or mixtures thereof.

1           10. The process as claimed in claim 9, wherein the  
2 bioresorbable polymer is a mixture of PCL and PLA.

1           11. The process as claimed in claim 9, wherein the  
2 bioresorbable polymer is a mixture of PCL and PLGA  
3 copolymer.

1           12. The process as claimed in claim 1, wherein the  
2 low molecular weight oligomer has a molecular weight of  
3 200 to 10,000.

1           13. The process as claimed in claim 12, wherein the  
2           low molecular weight oligomer has a molecular weight of  
3           200 to 5000.

1           14. The process as claimed in claim 1, wherein the  
2           low molecular weight oligomer is polycaprolactone triol  
3           (PCLTL), polycaprolactone diol (PCLDL), polycaprolactone  
4           (PCL), polylactic acid (PLA), polyethylene glycol (PEG),  
5           polypropylene glycol (PPG), polytetramethylene glycol  
6           (PTMG), or mixtures thereof.

1           15. The process as claimed in claim 1, wherein the  
2           organic solvent for dissolving the bioresorbable polymer  
3           and the low molecular weight oligomer is  
4           N,N-dimethylformamide (DMF), N,N-dimethylacetamide  
5           (DMAc), tetrahydrofuran (THF), an alcohol, chloroform,  
6           dichloromethane (DCM), 1,4-dioxane, or mixtures thereof.

1           16. The process as claimed in claim 1, wherein the  
2           bioresorbable polymer is present in an amount of 5-70%  
3           weight fraction of the bioresorbable polymer solution.

1           17. The process as claimed in claim 16, wherein the  
2           bioresorbable polymer is present in an amount of 10-50%  
3           weight fraction of the bioresorbable polymer solution.

1           18. The process as claimed in claim 1, wherein the  
2           low molecular weight oligomer is present in an amount of  
3           10-80% weight fraction based on the non-solvent portion  
4           of the bioresorbable polymer solution.

5

1           19. The process as claimed in claim 1, wherein the  
2           coagulant is water, an organic solvent, a mixture of water  
3           and an organic solvent, or a mixture of organic solvents.

1           20. The process as claimed in claim 19, wherein the  
2           coagulant is a mixture of water and an organic solvent and  
3           the organic solvent is present in an amount of 5-90% weight  
4           fraction.

1           21. The process as claimed in claim 20, wherein the  
2           organic solvent in the coagulant is an amide, a ketone,  
3           an alcohol, or a mixture thereof.

1           22. The process as claimed in claim 21, wherein the  
2           organic solvent in the coagulant includes a ketone and an  
3           alcohol.

1           23. The process as claimed in claim 1, wherein the  
2           step of exposing the bioresorbable polymer solution to a  
3           coagulant is performed at a temperature of 5°C to 60°C.

1           24. The process as claimed in claim 23, wherein the  
2           step of exposing the bioresorbable polymer solution to a  
3           coagulant is performed at a temperature of 10°C to 50°C.

1           25. The process as claimed in claim 1, after the  
2           bioresorbable polymer solution is exposed to the  
3           coagulant, further comprising washing the porous  
4           bioresorbable material in a washing liquid.

1           26. The process as claimed in claim 25, wherein the  
2           washing liquid is water, an organic solvent, a mixture of

3 water and an organic solvent, or a mixture of organic  
4 solvents and the organic solvent in the washing liquid is  
5 a ketone, an alcohol, or a mixture thereof.

1 27. A process for preparing a porous material having  
2 interconnected pores, comprising the following steps:  
3 dissolving one or more kinds of bioresorbable  
4 polymers and a low molecular weight oligomer in  
5 an organic solvent to form a bioresorbable  
6 polymer solution;  
7 making the bioresorbable polymer solution to form a  
8 pre-form;  
9 drying the pre-form to partially or completely  
10 remove the organic solvent on the pre-form  
11 surface; and  
12 exposing the pre-form to a coagulant to form the  
13 porous material, wherein the low molecular  
14 weight oligomer is soluble in the coagulant and  
15 the bioresorbable polymer is insoluble in the  
16 coagulant.